

Advantages of the new R472B refrigerant gas

- **APPLICATIONS.** R472B has been developed for the most common needs of Test Laboratories, allowing most of suitable environmental test chambers to reach -70°C without significant refrigerant plant modifications.
- **GWP.** R472B has a GWP that is about 96% lower than other gases used for ULT applications, such as R23 and 508b. Putting it in numbers: 14800 for R23, compared to 526 for our R472B.
- **SAFETY.** The ACS gas is non-flammable and non-toxic, and it is safe even in the event of escapes. R472B also passed the WCF (Worst Case Fractionations) and WCFE (Worst Case Fractionations for Flammability) tests. This is confirmed by ASHRAE, which has accredited our gas by assigning it the A1 safety class.
- **PERFORMANCE.** R472B allows to reach the following results when operating in the most common temperature range provided by most standards: a better cooling gradient down to -45°C (it is normally lower than R23 below -45°C).
- **RETROFITTING.** Refrigeration plants currently using R23 are 99% compatible with R472B; those machines that are not perfectly compatible can be adapted simply without structural modifications.
- **AVAILABILITY.** The mixture components are easily procurable, so guaranteeing availability on the market and a long lifetime to our R472B.
- **COMPATIBILITY.** The laboratory analyses of the mixture components subjected to endurance test showed that R472B is perfectly compatible with the commercial elements used in cascade refrigeration plants charged with R23 or similar. It is therefore not harmful and does not cause abnormal wears or premature aging.
- **EASY USE AND REFILL.** Miscibility is the property of two or more substances to be mixed together to form a homogeneous solution. Unlike the other available alternatives to R23, R472B is the only gas that makes it possible to use the gas bottle even partially, always ensuring the homogeneity of the mixture both inside the refrigerating plant and in the gas quantity remained in the bottle, being reusable in the future. This is a great advantage for the customer, since he can manage the gas bottles in an extremely easy and safe way, as it is normally the case for other gases commonly used in refrigeration, such as R449A or R452A.
ACS has selected **Nippon Gases**, one of the best gas producers in the world with a strong international presence, for the exclusive production of its ecological gas R472B.

